

### REMARKS

Favorable reconsideration and allowance of this application are requested.

#### **1. Request for Continued Examination**

As a procedural note, the present response is being filed concurrently with a formal Request for Continued Examination (RCE) under 37 CFR §1.114. Accordingly withdrawal of the "finality" of the November 14, 2008 Official Action is in order so as to allow entry and consideration of the amendments and remarks presented herewith.

#### **2. Summary**

Claims 17-33 remain pending in this application, of which claims 18 and 25-28 have been withdrawn from consideration as being directed toward patentably distinct species. As will become evident from the following discussion, all pending claims under examination are patentable over the applied publications of record.

#### **3. Response to 35 USC §103 Rejection**

The only issue remaining to be resolved in this application is the Examiner's rejection of claims 17, 19-24 and 29-33 under 35 USC §103(a) as allegedly "obvious" and hence unpatentable over Sacchetti et al. (US 5,698,487) in view of Wu et al. (US 6,555,494) and Sangokoya et al. (US 5,565,395).

In this regard, the applicants' comment with respect to such references as advanced in the Response Under Rule 111 dated September 3, 2008 is hereby incorporated by reference as if stated fully herein. In the final Official Action dated November 14, 2008, the Examiner has advanced four separate reasons refuting the applicants' prior arguments. In response, applicants request reconsideration in view of the following:

The Examiner apparently accepts the fact that Sacchetti does not disclose or suggest the metallocene complexes of the applicants' pending claims. However, the Examiner notes that the other references of record, namely Wu and Sangokoya, do disclose the complexes of the instant claims and thus asserts the combination of such secondary references with Sacchetti et al renders such claims unpatentable under 35 USC §103(a). As will become evident from the following discussion, such a combination is in error.

The Examiner's second point is that the applicant's prior argument regarding the pre-activation of the Sacchetti et al metallocene complex with triisobutylaluminum is incorrect. This pre-reaction occurs so as to render the catalyst soluble in the solvent of polymerization. The Examiner states that this metallocene complex such as ethylene-bis-indenyl zirconium di(isobutyl) is not activated until it is contacted with an activator such as the adduct support activator and aluminoxane. This is partly correct. In this regard, metallocene complexes are known to be activated by aluminoxane to form a cationic complex. This cationic complex comprises the zirconium metal with cyclopentadienyl ligands, one organic group like a butyl group and as a counter ion a methylaluminumoxane (MAO) counter ion. Immobilizing such a complex on a support does not change the activation or the active catalyst complex.

In the case of Sacchetti et al, the catalyst (indenylzirconium) is reacted with triisobutyl-Al and subsequently activated with aluminoxane. This is not the case with the applicants' claimed catalyst as aluminoxane is not used.

As for the third point, the Examiner argues that Example 8 of Sacchetti et al gives an experiment wherein the catalyst is not activated with methylaluminoxane. This is however incorrect. In column 13, line 34, it is clear that during the preparation of the catalyst a reaction is carried out with the catalyst in combination with EBI/MAO to prepare a catalyst. This catalyst is already activated with MAO and is present as a

cation/anion pair or in other words as an active catalyst. After the activation the polymerization is carried out. (See column 13, lines 44-51.) The polymerization is carried out with a triisobutylaluminum as a co-catalyst. Therefore, while at a glance it may appear that no MAO is used in the polymerization but, as mentioned above, in line 34 the catalyst was already activated during the immobilization of the catalyst. The TIBAL co-catalyst is presents as a scavenger.

The Examiner's fourth point is that the catalyst of the presently claimed invention contains a Chromium (Cr) metal. For Sacchetti et al it is clear that metallocene catalysts contain titanium, zirconium, vanadium or hafnium as metal atoms. (See column 6, line 22.) There is no mention of chromium as a metal. This is also known to the skilled person in the art. Specifically, the skilled person knows that chromium acts very differently as a metal than titanium, zirconium, hafnium and vanadium and therefore chromium cannot be considered as a metallocene catalyst even if it contains a cyclopentadienyl ligand.

In summary therefore, applicants note that Sacchetti et al in fact teaches metallocene catalysts. There is however no suggestion to use chromium as a metallocene catalyst in the applied references of record. In all examples, including example 8, MAO is used as an activator for the catalyst. Applicants therefore are of the opinion that, in addition to the prior arguments already advanced during prosecution to date, there is no reason to combine Sacchetti et al with Wu and Sangokoya.

Withdrawal of the rejection advanced under 35 USC §103(a) is therefore in order.

#### **4. Fee Authorization**

The Commissioner is hereby authorized to charge any deficiency, or credit any overpayment, in the fee(s) filed, or asserted to be filed, or which should have been filed

**SEVERN et al**  
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herewith (or with any paper hereafter filed in this application by this firm) to our Account No. 14-1140.

Respectfully submitted,

**NIXON & VANDERHYE P.C.**

By:           /Bryan H. Davidson/            
Bryan H. Davidson  
Reg. No. 30,251

BHD:dib  
901 North Glebe Road, 11<sup>th</sup> Floor  
Arlington, VA 22203-1808  
Telephone: (703) 816-4000  
Facsimile: (703) 816-4100